

INSTRUCTOR

Mike Gilmor, FCSCE

Vice-Chair, CSA S16 Technical Committee Member of the Standing Committee on Structural Design Former President, CISC Chairman, Canadian Steel Construction Council Former Editor, CISC's Handbook of Steel Construction

VENUES

SASKATOON

November 17, 2009 TCU Place – Saskatoon's Arts & Convention Centre Gallery Suite I & II 35 - 22nd Street East Saskatoon, SK S7K 0C8 306-975-7777

CALGARY

November 18, 2009 Sandman Hotel City Centre - Great Room I & II 888 7th Ave. SW Calgary, AB T2A 6J6 403-237-8626

EDMONTON

November 19, 2009 The Coast Edmonton Plaza Hotel - Drayton Valley Ballroom 10155 105 Street Edmonton, AB T5J 1E2 780-423-4811

VANCOUVER

November 20, 2009 The Coast Plaza Hotel & Suites 1763 Comox Street Vancouver, BC V6G 1P6 604-688-7711

TORONTO

November 24, 2009 Four Points by Sheraton -Kingston Room 6257 Airport Road Mississauga, ON L4V 1E4 905-678-1400

WINNIPEG

November 25, 2009 Holiday Winnipeg South -Conference Theatre Room 1330 Pembina Highway Winnipeg, MB R3T 2B4 204-452-4747

OTTAWA

November 26, 2009 Chimo Hotel -Franklin Room 1199 Joseph Cyr St. Ottawa, ON K1J 7T4 613-744-7845

FREDERICTON

December 1st, 2009 The Wu Conference Centre – Aitken Room University of New Brunswick 6 Duffie Drive Fredericton, NB E3B 5A3 506-453-5135

MONCTON

December 2nd, 2009 Université de Moncton -Local 226, CEPS Campus de Moncton Moncton, NB E1A 3E9 506-858-4759

ST. JOHN'S

December 3rd, 2009 The Battery Hotel and Conference Centre -**Riverhead Room** 100 Signal Hill Road St. John's, NL A1A 1B3 709-576-0040

MONTREAL

December 8, 2009 Hôtel Maritime Plaza -Salle Le Grand Mât 1155, rue Guy Montréal, QC H3H 2K5 514-932-1411 Formation donnée en anglais

DESCRIPTION

This one-day seminar will be a thorough examination of the newest edition of CSA Standard S16-09 to be the reference structural steel design standard for the NBCC 2010. The 2009 Edition contains numerous additions to the Standard that deal with new seismic systems (e.g., restrained buckling bracing systems, protected zones), design of single angles in various situations, more detail for laterally unrestrained beams, new material for infill plates with perforations, and new Annexes on topics such as Design to prevent brittle fracture and Structural design for fire conditions (now a procedure permitted by the NBCC).

Edmonton - November 19, 2009 Vancouver - November 20,2009

Winnjag - November 25, 2009 Toronto - November 24, 2009

Ottawa - November 26, 2

Fredericton - December 1 st. 2009 Moncton - December 2nd 2009 m's-December 3rd, 2009

This CSA Standard is now available from www.shopcsa.ca at the price of \$175 (paper copy) and \$160 (PDF file). Participants will obtain a 15% discount. Please write to mahmoud@csce.ca for your discount code.

Who Should Attend - Structural engineers, designers, civil engineers designing in steel, detailers, fabricators and educators.

AGENDA

This course will provide a thorough clause-by-clause review of the CSA Standard S16-09 with particular emphasis on what's new, what's changed, and what has remained the same. For example:

- · Emphasis on practical aspects of changes in this edition that will affect your designs
- · Changes impacting the design of laterally unsupported beams explored
- Changes impacting the design of members subject to tension and block shear defined
- Discussion of new clause dealing with connections with welds and bolts in same shear plane
- Why are there new requirements for column anchorages
- New buckling restrained bracing system for seismic lateral load resisting systems introduced to try to match the compressive and tensile resistances of the brace
- Introduction of new requirements for single angles in compression
- · The concept of "protected zones" explained
- Steel plate shear walls now have design provisions to handle penetrations through the infill panels
- · Requirements for structural documents explained
- Introduction of new guidance to reduce risk of brittle fracture
- Rationale behind the factor, Ry, applied to the specified yield stress of steel
- Discussion of new Annex which has been added to provide guidance for design under fire conditions





CSA-S16-09 REGISTRATION

www.csce.ca

GROUP (5 and more) and student rates are available upon request.

JOIN CSCE now at the introductory fee of \$95 + taxes and pay the CSCE member fee at all CSCE activities held during the coming year.

Please e-mail, fax or mail this form along with your payment to: Mahmoud Lardjane **Programs Manager** Canadian Society for Civil Engineering 4920 de Maisonneuve Blvd W., Suite 201 Montreal, QC H3Z 1N1 E-mail: mahmoud@csce.ca F: (514) 933-3504

Any registrant may substitute another person eligible for the same fee at any time. Full refund will be issued when a written notice of withdrawal is received 2 weeks before the event. An administrative fee is deducted at this time. We regret that there will be no refunds issued past this date. In the event that CSCE must cancel the program, the participant will receive a full refund for workshop fees.

🗌 Saskatoon – November 17, 2009 Calgary – November 18, 2009 Edmonton – November 19, 2009 Vancouver – November 20, 2009 Toronto – November 24, 2009 Winnipeg – November 25, 2009 Ottawa – November 26, 2009 Fredericton – December 1st, 2009

Moncton – December 2nd, 2009 St. John's – December 3rd, 2009 Montreal – December 8, 2009

7:45 Registration - 8:30 Start of session - 10:00 Coffee Break - 12:00 Lunch - 3:00 Coffee Break

| Name | | Date | | | |
|--|-----|------|--|--|--|
| Company | | | | | |
| Address | | | | | |
| E-mail | Tel | Fax | | | |
| CSCE Membership Number | | | | | |
| (1) My Professional Specialty is | | | | | |
| (2) At the end of the session, I will evaluate it as a success if it responds to my following objective(s) | | | | | |

I authorize CSCE to send my participation record to EIC for CE units registration. \Box YES \Box NO

PAYMENT

Please check as appropriate to you. Dates refer to receipt of registration by CSCE. Payment must be received to confirm your place. Refreshments, lunch and course materials are included.

| Registration Fees (incl. tax) | Early Registration On/before October 27, 2009 | | | | Open Registration After October 27, 2009 | | | | | |
|-------------------------------|--|----------|----------|----------|---|----------|----------|----------|----------|----------|
| Province | ON/AB/BC | MB | SK | NB/NL | QC | ON/AB/BC | MB | SK | NB/NL | QC |
| CSCE Member | \$367.50 | \$393.22 | \$385.87 | \$396.90 | \$395.06 | \$420.00 | \$449.40 | \$441.00 | \$453.00 | \$451.50 |
| Newly Enrolling CSCE Member | \$493.50 | \$528.04 | \$518.17 | \$532.98 | \$530.30 | \$546.00 | \$584.22 | \$573.30 | \$589.68 | \$586.95 |
| Non-CSCE Member | \$451.50 | \$483.10 | \$474.07 | \$487.62 | \$507.93 | \$504.00 | \$539.28 | \$529.20 | \$544.32 | \$541.80 |

Registrant Signature _ Registration Date Method of Payment (Check as appropriate to you)

□ VISA □ MASTERCARD □ CHEQUE ENCLOSED (payable to Canadian Society for Civil Engineering)

Credit Card Number _

Expiry Date -

CSCE MEMBERSHIP APPLICATION

| Name | | | Date of Birth | Sex |
|---------------------|--------------------|--------------------|---------------|-----|
| Indicate Desired M | ailing Address | | | |
| Home Address | i | | | |
| | | | | |
| Employer | | Bus. Title | | |
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| Professional Regist | tration / Membersh | nips Held Province | | |

| Professional Registration / Memb | erships Held Province | |
|----------------------------------|--|------------------|
| Are you a member of any other E | ngineering Societies? If so, give details: | |
| SOCIETY | PROVINCE(S) | MEMBERSHIP GRADE |

ACADEMIC RECORD/WORK EXPERIENCE (Please submit C.V. & photocopies of certificates or transcripts)

TECHNICAL DIVISION MEMBERSHIPS - Select up to three fields in order of preference, (i.e. 1,2,3)

| Cold Regions | Eng. Mechanics/Materials Eng. | Hydrotechnical | Computer Applications |
|------------------------|-------------------------------|----------------|-----------------------|
| Structural | Transportation | Construction | Environmental |
| Infrastructure Renewal | Sustainable Dev | | |

MEMBERSHIP GRADES

Member: holds a recognized educational qualification in Civil Engineering at the level recognized by a provincial Association of Professional Engineers and whose competence has been established by at least four years of professional experience. Associate Member: holds an engineering degree from a recognized university but has not yet acquired the qualifications for member status related to the extent of professional practice. Technologist Member: graduate of an approved Canadian Civil Engineering Technologist Program or its equivalent and is certified by a CSCE approved association. Affiliate Member: graduate of a university or other CSCE approved institution working in the field of civil engineering.